

MIT Sloan

News and insights for the MIT Sloan community



***Entrepreneurship
and the economy***
**WHAT YOU NEED TO
KNOW TO SUCCEED**

MIT Sloan

News and insights for alumni
Vol. 4, No. 1

DEAN

David Schmittlein
John C Head III Dean

MANAGING EDITOR

Tom Witkowski

CONCEPT AND DESIGN

Stoltze Design

CONTRIBUTORS

Grace Benson
Michelle Choate
Sam Doyon
Sean McCarthy
Tina McCarthy
Jed Shireman
Mary Tamer

PROOFREADER

Linda Walsh

PRINTING

ARTCO, Inc.

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Change of address

MIT Sloan Office of External Relations
30 Memorial Drive, Room E60-300
Cambridge, MA 02142
Phone: 617-253-1557
E-mail: mitsloanalumnirelations@mit.edu

Contacts

For subscription information, permissions, and
letters to the editor, contact our editorial staff.
Phone: 617-253-1557
E-mail: editor@sloan.mit.edu

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Cover story

18 The silver lining

The picture of economic doom and gloom has already been painted, yet entrepreneurs and entrepreneurial mentors say the forecast for certain startups couldn't be better. Here's what to consider before taking the leap.

Feature story

26 Five MIT Sloan companies to watch

Entrepreneurism has always thrived at MIT Sloan—and it continues to do so, even in today's economy. Despite the market turmoil that has presented enormous challenges for businesses worldwide, companies like Voxify, InVivo Therapeutics, Julianna Rae, HubSpot, and Visible Measures have all found ways to survive and flourish through the downturn.

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On the cover

Illustrator Andrew Baker created the artwork for this issue of the *MIT Sloan Alumni Magazine*. The cover image and series of illustrations that accompany the cover story depict entrepreneurs combining the needed elements for success and overcoming the challenges of today's economy. Baker lives in London and teaches an award-winning illustration course at Middlesex University.

Entrepreneurs boost recovery

IF ALL OF THE ACTIVE COMPANIES FOUNDED by MIT graduates formed an independent nation, their revenues would make its economy the 17th-largest in the world. Further, MIT alumni-funded companies have a disproportionate importance to their local economies because so many of them are manufacturing, software, biotech, or consulting firms that sell to national and world markets.

This data is from a recent study, “Entrepreneurial Impact: The Role of MIT,” completed by MIT Sloan Professors Edward B. Roberts and Charles Eesley for the Kauffman Foundation. These faculty members’ data clearly shows how important entrepreneurship is to economic vitality and, in the current climate, economic recovery. Just as importantly, the data shows how integral entrepreneurship is to MIT.

At MIT Sloan, being an entrepreneur is second nature. The School is alive with the energy, excitement, and ambition of a startup culture. In its programs, its Centers, and its classrooms, the School provides numerous entrepreneurship opportunities for its students. Through these experiences—The \$100K Entrepreneurship Competition, the Entrepreneurship Center, the Global Entrepreneurship Lab, the Entrepreneurship and Innovation program, to name but a few—MIT Sloan equips its students and alumni with the portfolio of skills and knowledge necessary to succeed.

The cover story in this issue of the *MIT Sloan Alumni Magazine* provides a guide to what every entrepreneur should know to build and manage a strong and successful business in this economy. But these lessons are important to understand in any economy. Among the necessary ingredients are a network of people and resources to support your endeavor. MIT Sloan and the MIT Sloan alumni community are sources for both of those.



Editor
Tom Witkowski

As alumni, you can tap into those great resources by following what is happening today at MIT Sloan and connecting with your fellow alumni. The alumni directory, <http://sloancf.mit.edu>, is the place to start. Please make sure that your information is up to date. This magazine also features more class notes than any of our previous magazines, another sign of the strength of the MIT Sloan alumni community and the value the School’s alumni put in maintaining connections to each other and to MIT Sloan.

As the economy improves, the entrepreneurs who started their businesses in what may have seemed like the worst of times will be poised to ride the economic upturn to success. And those who waited will be just getting started. They will have significant catching up to do.

Past recessions have created the economic turmoil during which the foundations of great companies have been built. This has been a difficult economic time, but no doubt, it has also been a time when great companies and leaders of the future have had their start. And MIT Sloan alumni are leading the way.

Best regards,

A handwritten signature in black ink that reads "Tom Witkowski". The signature is fluid and cursive.

Tom Witkowski



As MIT Sloan aims to be more sustainable, the MIT Sloan Alumni Magazine is moving toward electronic distribution. **You received this printed copy because we do not have your current email address.** We may not be able to send you future copies of the magazine if you do not update your contact information, especially your email address. To ensure you receive the next issue, visit the MIT Sloan alumni directory and update your information, <http://sloancf.mit.edu> or email editor@sloan.mit.edu.



>>> Please send us your current email address so we can continue to send you the MIT Sloan Alumni Magazine and help you stay connected with your classmates and School.

The name of the business is gaming

MIT SLOAN HELD ITS INAUGURAL BUSINESS IN GAMING CONFERENCE (BIG) on May 8, 2009. Highlighting current transformations and trends in the gaming industry, the conference featured panels covering topics like serious games, in-game advertising, digital distribution, and massively multiplayer online (MMO) business models.

The conference opened with an address by Susan Bonds, president and CEO of 42 Entertainment, who offered her perspective on how alternate reality games (ARG) have helped her company to create buzz for movies like *The Dark Knight* and games like *Halo 3*.

Equally as focused on the changes happening in the world of in-game advertising, the first panel of the day discussed several bellwethers in the industry, including current standards for metrics, product placement, and static versus dynamic three-dimensional ads in the sector. A panel on digital distribution, a unique expanding market, was very focused on opportunities made available to the consumer and designer by new digital distribution models. The MMO panel offered insight into the differences between Asian MMO markets, which tend to be dominated by free-to-play business models, and their North American counterparts, which tend to operate on a subscription-based model.

The conference closed with a keynote question-and-answer session with Ken Levine, cofounder, president, and creative director of 2K Boston. Levine sat down with Dennis Fu, MBA '09, who elicited advice from Levine about entrepreneurship and business models in the gaming industry and provided a nice synthesis of the knowledge gained during the day.

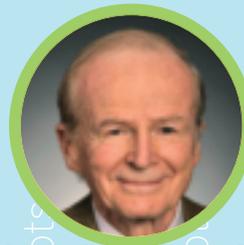


The inaugural Business in Gaming Conference brought together industry leaders, game developers, academics, and students from leading MBA schools to discuss the newest business trends and the future of the gaming industry.



John D.C. Little was honored at a "John D.C. Little Festschrift Celebration," from June 6-7 at the 2009 INFORMS Marketing Science Conference held at the University of Michigan. A festschrift is a volume of papers written to honor an individual, which in John's case will eventually include about 20 papers and be published in 2010.

Sloan Fellows Professor of Management Emeritus **Edgar Schein** was presented the 2009 Distinguished Practitioner Scholar Award, an Academy of Management (AOM) Career Achievement Award. This award recognizes his significant contributions in using practice-based learning to influence theory and/or research-based theory to influence the practice of management.



Robert C. Merton (1970) Professor of Financial Economics **Stewart Myers** is a co-winner of the 2009 III Edition of the Jaime Fernández de Aroz Corporate Finance Award for his paper "The Internal Governance of Firms."



campus snapshots

New podcasts discuss India Lab, G-Lab, and LGO

INDIA LAB '09: EDUCATIONAL ENHANCEMENTS

Creating employable workers for India's economy

MIT Sloan's inaugural India Lab saw teams of students addressing specific challenges in a variety of industries across India. Ted Chan, MBA '09, discusses his work with prominent industrialist and MIT alumnus Vinay Rai, class of 1970, whose goal is to combat perceived voids in India's educational system by setting up a series of rural business schools. In the end, the team produced educational and business models for the would-be B-schools, schools which they hope will produce employable workers for India's current economy.

INDIA LAB 2009: BANGALORE

Working toward market expansion

Katie Barrett and her fellow MBA 2010 teammates spent four months working with Bangalore-based Adea, an IT company, toward possible expansion into the Boston market. Two weeks on the ground in Bangalore gave the team insight into the impact a country and a culture can have on a business, and gave them the information they needed to decide in favor of expansion.



Robert Gibbons was elected to the American Academy of Arts & Sciences, one of the nation's most prestigious honorary societies and a center for independent policy research. The current membership includes more than 250 Nobel Laureates and more than 60 Pulitzer Prize winners.

Kristin Forbes and Ronald A. Kurtz (1954) Professor of Entrepreneurship **Simon Johnson** have been appointed to the Congressional Budget Office's Panel of Economic Advisers, the non-partisan organization that provides the formal analysis for Congress.



Senior Associate Dean **Alan White** was awarded an Honorary Professorship at the School of Management at Fudan University in Shanghai. White was recognized as the architect of MIT Sloan's China Management Education Project, which has contributed greatly to the development of Fudan's IMBA program.

Damon Centola is the co-winner of an American Sociological Association (ASA) Section Award: the 2009 Outstanding Article Publication Award in Mathematical Sociology. This honor recognizes the contributions of Damon's *American Journal of Sociology* article, "Complex Contagions and the Weakness of Long Ties."



G-LAB '09: MADEA PROJECT, TANZANIA

Striving for economic empowerment for AIDS victims

Prior to leaving for Tanzania, a five-person student team was presented with what seemed on the surface a health care initiative for those afflicted with AIDS. Once on the ground in Africa, however, they were confronted with some sobering realities and a diverse slew of issues. Through meeting with AIDS patients and their caregivers and working with the MAdeA organization to properly assess its goals, the team realized what was truly needed was economic empowerment for the patients and a new strategic direction for MAdeA. Ted Chan, MBA '09, and Krishna Venugopalan, SF '09, discuss the importance of not jumping to conclusions, understanding the cultural motivation for decisions, and orders of magnitude.

INTELLECTUAL CAPITAL: DON ROSENFELD

Bridging the gap between management and technology with the LGO program

MIT Sloan's Leaders for Global Operations (LGO) program bridges the gap between management and technology, providing critical knowledge for today's global operations managers. Program Director Don Rosenfield talks about how LGO has evolved, and the impact of globalization on supply chain and operations.

Listen to these podcasts and more at <http://mitsloan.mit.edu/newsroom/podcasts.php>.



Alumni news: Braving new frontiers

Robin Chase, SM '86, the co-founder of ZipCar and CEO of GoLoco, an innovative online ride-sharing tool, was named to *Time Magazine's* "Top 100 Most Influential People" list. Chase is recognized for the influence her companies have had in the area of social entrepreneurship.

Massachusetts Governor Deval Patrick announced the creation of MassChallenge, a multimillion-dollar annual venture funds competition, inspired by the MIT \$100K Entrepreneurship Competition. One of the competition's founders is **John Harthorne, MBA '07**, a winner of MIT's \$100K Competition. **Anand Daniel, MBA '07**, served as a judge in a similar event, the 2009 TYE Business Plan Competition, held in Boston. Co-founder of the Venture Capital Competition while at MIT Sloan and senior associate of Flybridge Capital Partners, Daniel was well positioned to contribute to TYE's goal of empowering young entrepreneurs through training, experience, and a potential \$10,000 payout.

Envysion, led by president and CEO **Matt Steinfert, MBA '97**, has been gaining traction lately. Steinfert presented his "Managed Video as a Service" product at the 2009 New York Venture Summit, a premier gathering of early-stage ventures. Among other high-tech features, Envysion's remotely managed video service allows companies to link cash register data with surveillance footage to reduce theft.

Robert Thirsk, MBA '98, is a member of a six-person crew that has been living on the International Space Station. On May 27, he and two other crewmates launched from Kazakhstan to join the other three already aboard the station, where they are scheduled to live for six months.

George Weyerhaeuser, Jr., SM '86, was keynote speaker at the 2009 International Conference on Nanotechnology for the Forest Products Industry in Alberta, Canada. In June, Weyerhaeuser addressed an international audience of leading researchers and stakeholders in nanotechnology-based advances, and spoke about the changing global context for technologies in forest products, including nano-enabled biomaterials.



Robin Chase, SM '86



John Harthorne, MBA '07



Anand Daniel, MBA '07



Matt Steinfert, MBA '97

Catching up with Richard Locke

Deputy Dean

Richard Locke joined the MIT Sloan faculty as an assistant professor of international management in 1988 after receiving his PhD in Political Science with a specialty in political economy. He has taught political science at MIT, held the Alvin J. Siteman (1948) Professorship of Entrepreneurship at MIT Sloan, and now serves as the School's deputy dean. He is a leading expert on Sustainability and at MIT Sloan he has helped launch the Global Entrepreneurship Laboratory (G-Lab) and the Laboratory for Sustainable Business (S-Lab).

Rethinking the American economy

It was very exciting to be a part of MIT Sloan in 1988 because of the energy about rethinking the American economy to make it more competitive. Prior, I had studied industries and firms and how different institutional frameworks, policies, and countries impact how they adjust to global markets. I was struck by the community of scholars at the School, who were studying issues that were closely related to what I cared about but from completely different perspectives—microeconomics, strategic management, supply chains, and even innovation. It was both terrifying and exciting to realize how little I knew about firms and how much I could learn.

would be a great way to teach about the global economy and the essence of entrepreneurship by showing how the same phenomenon unfolds differently outside the United States. We launched G-Lab in 2000 with 55 students enrolled. Today close to 200 students take three different sections of G-Lab.

Laboratory for Sustainable Business (S-Lab)

Three years ago John Sterman, Rebecca Henderson, and I realized that we each cared passionately about some aspect of what we call sustainability, whether it was climate change, energy, or issues of economic development and social justice. Yet we all treated these concerns as our private



Changing the world through management

As deputy dean, I am involved in the management of the School in issues such as hiring, promotion, fundraising, and the wide portfolio of educational programs in which the School is engaged. When considering new programs, I make sure each reinforces MIT Sloan's mission. They must strengthen our research and teaching on campus while enhancing our visibility and reputation worldwide. This is particularly true for our international activities and partnerships. I work with (Senior Associate Dean) Alan White to make sure these programs remain economically and operationally viable. I also provide oversight on the Executive Education program, which comprises more than 25 percent of the School's revenues. I am particularly interested in launching a certificate program in sustainable business and more activities around ethics in our curriculum.

MIT is doing fascinating work every day in the areas of energy, climate, infrastructure, and new materials. In order for those innovations to become operational, they need to engage with organizations and markets. And that is what MIT Sloan knows about. We have an incredibly smart and well-trained student body with great values. They don't want to just passively learn things; they want to go out into the world and change it. It's an incredible energy. When people who truly care about management think of the business school that will teach them how to change the world, I want them to think of MIT Sloan.

“MIT is doing fascinating work every day in the areas of energy, climate, infrastructure, and new materials. In order for those innovations to become operational, they need to engage with organizations and markets.”

Global Entrepreneurship Laboratory (G-Lab)

Simon Johnson and I were co-teaching a course called “Entrepreneurship without Borders” that examined the process of entrepreneurship outside of the United States. One assignment required students to work in teams to advise real entrepreneurial firms. This sparked a lot of energy from the students, so we designed a course that enables students to intern with similar firms in countries that don't have U.S.-style financial markets, legal systems, corporate governance mechanisms, and labor markets. We felt this

hobbies because our day jobs were to teach technology strategy, business dynamics, or global markets. After talking, we realized how our individual concerns had ties to everyone else's concerns. In 2006 we came together and decided to teach a course, very much like the project-oriented G-Lab, that would educate MBA students about the challenges and opportunities surrounding sustainability. We assembled a series of cases with recognizable companies such as Nestlé, IBM, and Nike that were already engaged in either redesigning their existing operations or launching new businesses that were more sustainable.

MIT Sloan: In the world. For the world.

DEAR MIT SLOAN ALUMNI AND FRIENDS,

With your help, MIT Sloan has successfully navigated these challenging times—enhancing our academic programs, increasing faculty impact, and expanding our global visibility.

Our new degree programs—the Master of Finance (MFin) and the Master of Science in Management Studies (MSMS)—have each attracted outstanding students, due in large part, to your enthusiastic support. This spring, we led our peer schools in MBA student job opportunities, surpassed our peers in MBA applications since 2007, established a record in applications for this fall’s class, and realized a new standard of quality and diversity in the matriculating class. Faculty recruitment efforts were especially productive. Our mission-driven approach to management and strong fiscal discipline appeal to the best prospects.

Our MIT Sloan China Management Education Project continues to develop world-class management practice in that country. We expanded project-based learning in Brazil and India. In Africa, the new Global Health Delivery version of our G-Lab course assists NGOs in bringing financially stable, quality health care to the neediest communities. We are the founding sponsor for the Skolkovo School of Management. This new school is already the leading private business school in Russia, and is bringing MIT Sloan close to business leaders in that dynamic region.

It may seem that MIT Sloan has been unaffected by the economic crisis, but that would be incorrect. This last year, we reached out as never before to support alumni in unplanned career transitions. When a source of student loans disappeared, we created a new loan option, ensuring continued access to an MIT Sloan education. Our faculty and staff served in leadership positions for task forces across MIT, assisting the president and provost to achieve financial balance for the Institute as a whole. Finally, MIT Sloan’s faculty have been leaders in explaining the financial crisis, crafting paths through it, and building safeguards against future crises.

In all this, MIT Sloan has relied upon its alumni network. By reaching out to classmates and colleagues, attracting new students, and hiring recent graduates, you are our most effective ambassadors. Our incoming students and recent graduates profit from the alumni network. More seasoned alumni in transition and those beginning entrepreneurial enterprises also rely on this network. I urge you to remain connected and update your contact information in the alumni directory (<http://sloancf.mit.edu>).



David C. Schmittlein
John C Head III Dean

We have increased alumni engagement and expanded our external relations staff, and you have responded with loyalty and generosity. With these changes, we are on the way to joining the leading schools of management in engagement and support—a position MIT Sloan has not historically occupied. Many business schools have seen declines in giving, but MIT Sloan has not. Your support of the Annual Fund via unrestricted gifts, which reached an all-time high this past year, is crucial to enhancing our academic programs and increasing our impact.

This success is a testament to you and a reflection of MIT Sloan’s distinctiveness. Your school is, as no other school of management: *In the World. For the World.*

In the World: MIT Sloan’s unwavering dedication to designing effective, reliable management processes; continuous innovation; principled leadership distributed across the organization; and entrepreneurship has kept us deeply connected to the needs of organizations, while other schools have been distracted. It has also kept us in the world, and is appreciated by our students—and by the companies that recruit them—now more than ever.

For the World: Consistency and character of our outreach, through collaboration and OpenCourseWare, through partnership and global projects, have made us the envy of other US schools; have led us to be seen, uniquely, as the school of management for the world, and have broadened our base of support now, when we need it most.

MIT provides the ideas that change the world. At MIT Sloan we understand that organizations are the way that ideas change the world. Positive change in the world is a worthy role for a great school of management—yours. Thank you for your support.

Best regards,

Dave Schmittlein

Shuba Swaminathan, MBA '10

- Co-invented USB thumb drives
- Currently holds five issued US patents with nine more pending
- Was first runner-up in the 2008 MIT Sloan Elevator Pitch Contest in the mobile track



*“Working as an entrepreneur ...
gives me tremendous
professional satisfaction.”*

Just two years after graduating with an MSEE from Rensselaer Polytechnic Institute, Shuba Swaminathan co-invented USB thumb drives. Her work resulted in five issued US patents with nine more pending.

Swaminathan, an electrical engineer, presented a working prototype of her data-storage device to upper management in 2001, but was disappointed to learn that it would not be brought to market due to budget constraints. Six months later, thumb drives were introduced to the mainstream market by Taiwanese manufacturers with Israeli companies claiming credit for the invention. “It was a low point in my career,” recalls Swaminathan. “I had the technology sitting on my desk. If only I had been savvy enough to bring it to market.”

The experience was an awakening for Swaminathan. “I realized that as an engineer I can create amazing new products,” she says. “But unless I have the ability to make my work known and to sell my products to upper management and the rest of the world, they will never see the light of day.”

Eight years later when Swaminathan’s son was born, she decided to take time off from corporate America. She was comfortable in various roles—hardware designer, market analyst, software engineer, and inventor—but she found that of a stay-at-home mom the most challenging. During that time, however, the idea for her first startup was born.

“One seemingly simple task that I found to be increasingly difficult with a child in tow was going to the grocery store,” she says. “So I created a service offering that would alleviate the difficulty.” Her startup Smart Shopping Solutions allowed customers to order their groceries from home using cell phone

cameras. When a customer ran out of a specific item in the kitchen, they would send her an image of the product’s barcode. This information would then be translated into a shopping list to be sent to the customer’s favorite grocery store. The store then gathered and packaged the goods to be picked up later. “It was a great enterprise,” she notes. “Clients were willing to pay for the creation of the offering, and retail stores backed the service since it brought in more repeat shoppers.”

Her business stalled in 2008 when a Germany-based company filed a lawsuit claiming that they owned the proprietary rights to translate barcodes into numbers. The case was dismissed in court, but by that time Swaminathan had been accepted to MIT Sloan. Since she had already spent six months unable to deliver her grocery service to clients, she decided to pursue her education instead.

In her first year, she won first runner-up in the 2008 Elevator Pitch Contest in the mobile track, and began working on her second startup, which involves digital receipts. “My time at MIT Sloan has taught me how to quantify the value of my entrepreneurial ideas and speak the language of management,” she explains. “After graduation I will be pursuing more startups. I thrive on the fast pace at a startup and the opportunity to wear many hats while building something of practical value. Working as an entrepreneur dovetails many of my strengths, leverages my education, and gives me tremendous professional satisfaction.”

PhD student receives prestigious fellowship

JAYSON JAY, A DOCTORAL STUDENT AT MIT SLOAN, has received the Switzer Fellowship, one of the nation's most prestigious awards for early-career environmental leaders.

At the MIT Sloan Organization Studies Group, Jay works as a researcher, teacher, writer, and consultant. His passion is in fostering learning and innovation within and across organizations to help realize a sustainable future. Jay's dissertation research examines the challenges of cross-sectoral collaboration in promoting energy efficiency and renewable energy at the municipal level. As a research partner of the Sustainable Food Lab, he has written case studies of company-NGO collaboration to foster sustainable and equitable agriculture in the developing world, and plans to examine the institutional evolution of sustainable food. In 2008, Jason co-developed the MIT Leadership Lab course with Peter Senge and Wanda Orlikowski, combining classroom learning on sustainability and leadership with action learning on real-world projects with partner organizations.

Jay is among 20 leading environmental scholars to receive the \$15,000 award from the Robert and Patricia Switzer Foundation to complete their master and doctoral degrees and advance their skills and develop their expertise to address critical conservation challenges.

"The Switzer Foundation is building a network of leaders with the skills and dedication to address the most challenging environmental issues of our time," explains Lissa Widoff, executive director of the Foundation. "The 2009 Fellows are talented individuals from all sectors—science, ecology, business, law, education, and journalism among others. These leaders exemplify our belief that we need individuals working towards environmental improvement in all facets of our society and that to solve complex problems we need cross-sector collaboration."



LEADERS FOR GLOBAL OPERATIONS

LFM changes its name

THE MIT LEADERS FOR MANUFACTURING (LFM) PROGRAM has announced a new name: Leaders for Global Operations (LGO). This new identity reflects the expansion from LFM's historically broad understanding of manufacturing to encompass all aspects of operations. The program will continue to build on its strengths in production and logistics, as well as on the consistent #1 rankings given to MIT School of Engineering and MIT Sloan's Operations Management Group in *U.S. News & World Report's* annual evaluation of graduate programs.

"As LFM has succeeded over the 20 years since it was founded by MIT Sloan, the MIT School of Engineering, and industry, our understanding of manufacturing has broadened considerably to include critical operations across the entire supply chain," said David Simchi-Levi, Professor of Civil and Environmental Engineering and Engineering Systems and LGO Co-Director from the MIT School of Engineering. "We believe operations excellence to be a core element of national competitiveness and the basis for advancement in developing countries."

After an extensive research process involving all the program's constituencies, the LGO Governing Board approved the change in name and mission. The board also directed LGO to address operations challenges beyond such traditional manufacturing sectors as automotive, aerospace, and high tech manufacturing, to include supply chain retailers such as Amazon.com and Inditex, S.A. (Zara).

The joint program will continue to reside within the MIT Engineering Systems Division, an interdisciplinary academic unit spanning most departments within the School of Engineering and all five MIT schools. Building on the work of LFM, LGO will continue to generate cutting-edge research at the intersection of engineering and management.



The Switzer Foundation recognized Jayson Jay, a doctoral student at MIT Sloan, as an early-career environmental leader.

Faculty news: Faculty receive global recognition

MIT Sloan faculty continue to be recognized for their expertise and accomplishments. President Obama tapped former Associate Professor **Lael Brainard** for undersecretary for international affairs in the Treasury Department. In China, Mizuho Financial Group Professor of Finance **Jiang Wang** will take on the role of dean at the new Shanghai Advanced Institute of Finance, where he hopes to highlight practical ability throughout the curriculum. MIT Sloan's Senior Lecturer **Peter Senge, PhD '78**, was listed at No. 35 among the Fast Company's 100 most creative people in business in recognition of his concept of the "learning organization" and for helping organizations navigate complex change in the world today.

Bank of America recently awarded a \$22 million grant to a study shared by Harris & Harris Group Professor **Andrew Lo**, which, in conjunction with the Center for Future Banking, will support research into "next-generation analytical models" for banking. Lo was also featured in a *Financial Times* article discussing his "adaptive market hypothesis." Merging behavioral and efficient markets theory using Darwinian biology, this new theory stands to offer insight into the circumstances in which markets behave efficiently. Guest writing for CBS News, Assistant Professor **Gustavo Manso** spoke against over-regulating executive pay, asserting that a growing body of research in economics and finance shows that a mix of long-term incentives and golden parachutes will best spark creativity and innovation.

In the consumer-centric nature of business today, MIT Sloan Professor, Management of Innovation **Eric von Hippel** posits in a *Forbes* article that much can be learned from users and how they create new products or modify existing ones to make them work in novel ways. In other consumer studies, MIT Sloan Assistant Professor **Damon Centola** has found that Internet users gravitate to the same social cliques online that they occupy in the real world.

At SAP's annual user conference, The Schussel Family Professor of Management Science **Erik Brynjolfsson, PhD '91**, participated in a roundtable discussion for industry analysts and press in an attempt to deliver some clarity to the age-old conflict between CFO and CIO. Senior lecturer **Mike Grandinetti** moderated a panel at the Indus Entrepreneur TieCon East conference in May, one of the largest entrepreneur gatherings in Massachusetts. In July, MIT Sloan Visiting Associate Professor **Alan MacCormack** traveled to Malaysia with other management experts to conduct courses and practical workshops on soft skills and management skills, an area believed to be critical to Malaysia's economic development.

For more faculty news, please visit the MIT Sloan Newsroom at: <http://mitsloan.mit.edu/mag/press>.



Peter Senge, PhD '78



*Harris & Harris Group
Professor Andrew Lo*



*Assistant Professor
Damon Centola*



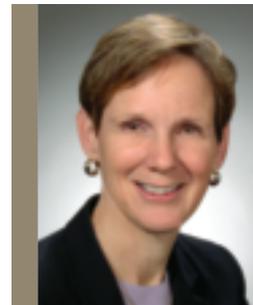
*The Schussel Family Professor
of Management Science
Erik Brynjolfsson, PhD '91*

IT Savvy:

Making IT a strategic asset to outperform competitors

When Ron Williams became president of U.S. health-care services giant, Aetna, Inc., in 2002, the company had just reported an annual loss of \$280 million and was on the brink of failure.¹ Just five years later in 2007, Aetna posted net income of \$1.8 billion and was named by *Fortune* magazine as the country's most admired company in health care. When Williams, now Aetna CEO and chairman, discusses the firm's success, he notes that the development and use of a dynamic information technology (IT) base was essential.²

Aetna is IT savvy. The company consistently uses IT to inform management decisions and to enhance its products and services—and being IT savvy pays off. Our research found that firms with above-average IT savvy and spending have margins 20 percent higher than the industry average. In contrast, firms with less-than-average IT spending and savvy have margins 32 percent lower than the industry average. Just as important, being IT savvy puts a firm in the position to take advantage of future business opportunities.³



Jeanne W. Ross

Jeanne W. Ross is director and principal research scientist at the MIT Sloan Center for Information Systems Research where she lectures, conducts research, and directs Executive Education courses on IT management practices. Her research examines organizational and performance implications of enterprise initiatives related to enterprise architecture, IT governance, outsourcing, and business agility. Her work has appeared in major practitioner and academic journals, including *Sloan Management Review*, *Harvard Business Review*, the *Wall Street Journal*, *MISQ Executive*, *MIS Quarterly*, the *Journal of Management Information Systems*, *IBM Systems Journal*, and *CIO Magazine*.

How IT savvy is your firm?

IT savvy is reflected in a firm's ability to use IT to consistently drive performance. Like *savoir-faire*, IT savvy looks effortless from the outside. A quick test will reveal how IT savvy your firm is.

Can you:

- Respond to new customer demands in a timely manner?
- Present a single face to global customers?
- Reproduce business successes in a new market?
- Quickly integrate new acquisitions?
- Ensure that local decision makers simultaneously do what's best for customers and the firm?

Peter Weill

Peter's work centers on the role, value, and governance of IT in enterprises. Peter joined the MIT Sloan faculty in 2000 to become director of MIT Sloan's Center for Information Systems Research (CISR). MIT CISR is funded by more than 70 corporate sponsors and patrons, and undertakes practical research on how firms generate business value from IT. Peter is now Chairman of MIT CISR and focuses on globalizing MIT CISR research and delivery. In 2008 Ziff-Davis recognized Peter as #24 of their "Top 100 Most Influential People in IT." Peter has written award-winning books, journal articles, and case studies. His work has appeared in *Harvard Business Review*, *Sloan Management Review*, and the *Wall Street Journal*.



Because IT-savvy firms have the systems to support strategic business priorities, they more often answer "yes" to these questions.

In contrast, firms that are not IT savvy often have systems that were built to support isolated business needs. To address firm-wide needs, these businesses spend much of their IT resources attempting to tie their systems together. Over time, management finds that it takes longer to test new systems and integrate them with existing ones. Besides becoming increasingly vulnerable to systems outages, this patchwork of systems makes it difficult to respond to changing business conditions. As a result, the average firm spends 68 percent of its IT budget operating and maintaining these systems—funds that are then not available for introducing new products or services.⁴

Three rules of IT-savvy firms

At savvy firms, IT is a strategic asset. In today's digital economy, if IT isn't an asset, it's a liability. To transform IT from a liability to an asset, management must continually pursue three activities:

1 Fixing what's broken

In most firms, IT fails to meet business needs because of a broken accountability and decision-making model. Without a clear, enterprise-wide approach to how IT will support your strategy, you will continue to focus resources on tactical systems instead of using IT as a basis for doing business in today's digital economy. IT-savvy firms have addressed their legacy problems by providing both a clear vision for how IT will support business operations and a well-understood funding model focused on delivering that vision.

Over many years, for example, Aetna had built each new system to support a different insurance product. As a result, Aetna entered the 21st century with multiple, redundant processes and systems as well as fragmented

customer data. The company had multiple approaches for core activities like opening an account, underwriting a policy, and paying a claim. Aetna's management structures and decision-making processes reinforced its piecemeal business processes. The result: Aetna had no good way to provide a single view of a customer's account.

To improve its systems and processes, Aetna first had to rethink how to deliver goods and services to customers. In doing so, the company reorganized the business around its major customer segments, redefined its business processes in terms of customer requirements, and reengineered the IT project funding process to focus on enterprise initiatives rather than product silos. These were critical steps in preparing to build a digitized platform.

2 Building a digitized platform

Once you've changed your approach to IT, you're ready to build a digitized platform. A digitized platform is a coherent set of standardized, IT-enabled business processes along with supporting infrastructure, applications, and data. To build a digitized platform, management must start by identifying what business processes are not changing. A digitized platform standardizes and automates these processes, thereby increasing reliability, decreasing operational cost, and ensuring quality. By automating what's not changing, a digitized platform allows management to focus attention on what is changing in the marketplace.

Aetna's platform development initially focused on the data that would allow integration of business processes to meet customer needs. Management defined five categories of shared operational data: Claims, Enrollment (or Member), Product, Plan, and Provider. After several years of developing data repositories and reengineering business processes to better use that data, Aetna's platform remains a work-in-progress. However, the platform is continuously

Becoming IT savvy requires a **clear vision, strong leadership, and a significant change management effort.**

improving the decision-making processes and operations that rely on this data.

At Aetna, the digitized process platform encompasses the daily servicing of customer needs, ranging from opening an account to settling a claim. Aetna has built a solid technology base and layered it with reliable, predictable business processes for daily transactions—but the reliability and predictability of daily transactions are only the beginning. Like all IT-savvy firms, Aetna uses the data generated from its core transactions to inform and empower decision-makers.

3 Exploiting the platform for profit and growth
Fixing what's broken and building a platform are both demanding undertakings, but the bigger challenge is leading organizational change and driving value from the digitized platform. To cash in on your platform, you will be changing individual roles, organizational structures, and the organizational culture. This is a fundamental business change and, thus, a major leadership challenge.

At Aetna, Ron Williams emphasized the need for data-driven decision making and spearheaded the effort to put consistent, reliable data in the hands of managers.

He and John Rowe, his predecessor as CEO, also encouraged employees to leverage the firm's data to develop new products and services for customers. One such service, the Aetna Navigator—which provides online medical advice for individuals—won accolades for being the best of its kind.⁵

Leading an IT-savvy firm

Becoming IT savvy requires a clear vision, strong leadership, and a significant change management effort. It can be difficult to distinguish IT-savvy firms' use of IT from their outstanding business management. Indeed, a characteristic of IT-savvy firms is that IT is at the heart of highly effective management. IT is the platform and scaffolding for delivering world-class operations and strategically focused management decision making. Fewer than one-third of the firms we've studied are IT savvy, but our research suggests that IT savvy will become a prerequisite for doing business in the digital economy. It's time to get started. ● ● ●

¹The material on Aetna in this chapter is primarily drawn from Cyrus F. Gibson, "Turnaround at Aetna: The IT Factor," working paper 362, MIT Sloan CISR 2006.

²From "Leading Change: A Conversation with Ron Williams," MIT Sloan School of Management's *Dean's Innovative Leader Series* on October 9, 2008.

³See Peter Weill and Sinan Aral, "Generating Premium Returns on Your IT Investments," *Sloan Management Review* 47, no. 2 (2006): 39; and Peter Weill et al., "Becoming More IT Savvy and Why It Matters," research briefing vol. VII, no. 1D, MIT Sloan CISR 2007.

⁴MIT Sloan CISR Survey of 1,508 firms in 60 countries in late 2007.

⁵"How good is your online nurse?" *BusinessWeek Online*, February 20, 2006.

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This past June, a record-breaking 599 MIT Sloan alumni returned to Cambridge to celebrate their connection to the School. For members of the Classes of '55, '60, '65, '70, '75, '80, '85, '90, '95, '00, '05, and '09, Reunion is just months away. As we plan the alumni community's return to campus June 3-6, 2010, it is a great time to reflect on the highlights of

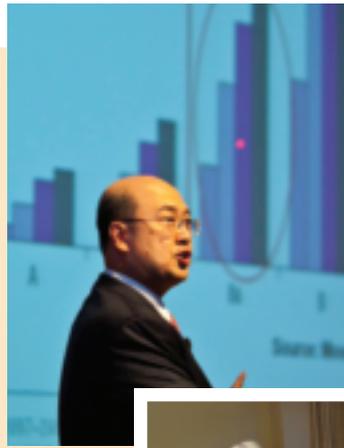
Reunion 2009



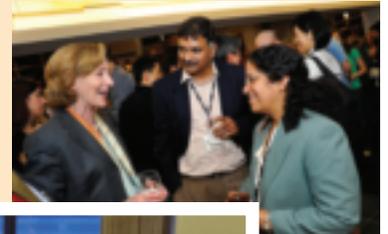
The Class of 2008 returned in large numbers to celebrate their first Reunion.



Professor Andrew Lo spoke on the State of the Economy during a Back to the Classroom session.



MIT President Susan Hockfield conversed with Venkata Kode, SM '79, and his wife Sandhya at the Friday night C-function.



During June 4–7, the MIT Sloan campus buzzed with alumni who graduated in 2008 or a year ending in a “4” or a “9.” Friends and family reconnected with former classmates, formed new relationships, and updated themselves on the happenings at MIT Sloan since they last visited. Most alumni began the weekend at the Friday night C-function, where John C Head III Dean David Schmittlein and MIT President Susan Hockfield mingled with attendees.



The Class of 1969 dined together on Saturday night at the Westin Copley Hotel.

The spirit of education filled the classrooms of E51 on Friday and Saturday as graduates and their guests listened to lectures from alumni and distinguished members of the faculty. During the Dean’s Luncheon, guests listened to Dean Schmittlein deliver his State of the School address and field questions from the audience.

Class-specific seminars and workshops were held over the course of the weekend, but the most widely attended alumni events were the class dinners, all held at the Westin Copley Hotel. The dinners provided classmates with time to reconnect more intimately amid smiles, laughter, and food. Afterwards, many classes hosted post-events in Boston, ensuring that their discussions went on through the night.

Michael Birt, SM '59, and his wife Anne discussed the future of MIT Sloan with Dean Schmittlein after his State of the School address.



Sunday’s Family BBQ ended the weekend on a high note. Perfect weather and a visit from the ice cream truck set a celebratory mood as alumni and their children participated in a range of family activities. After fond farewells, alumni returned home energized and excited for their next MIT Sloan Reunion.



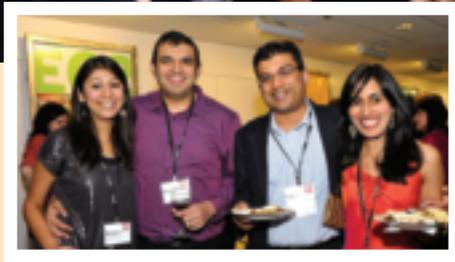
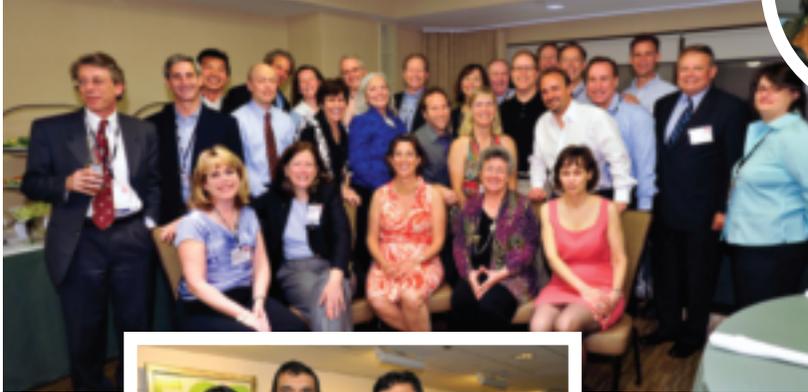
Alumni and their children spent Sunday afternoon laughing and playing at the Family BBQ.

The Classes of 1954 and 1959 enjoyed each other’s company during a Saturday night dinner.



Anja Hummel, SM '94; Jennifer Toomey, SM '94; and Steve Chaffin, SM '94, reconnected at the C-function.

The Class of 1984 shared memories and laughter over good food at their class dinner.



Mandavi Tandon; Saurabh Tandon, MBA '04; Vishal Jain, MBA '04, and Arpita Jidani at the C-function.



Jeffrey Bailey, SM '79, and his wife Cheryl mingle with classmates and friends during the weekend.

Reunion highlights:

- More than 960 alumni and their guests from 25 different countries returned to Cambridge to attend Reunion 2009.
- With the help of over 100 alumni Reunion Committee organizers and volunteer speakers, 47 compelling events were held over the weekend.
- \$2.4 million was raised by Reunion classes in 2009.

If 2010 is your Reunion year and you would like to participate in your class's Reunion Committee, please contact mitsloanreunionteam@mit.edu.

For more information on Reunions 2009 and 2010, visit <http://mitsloan.mit.edu/alumni/reunion>.



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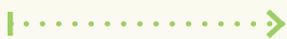
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*The picture of economic doom and gloom has already been painted, yet entrepreneurs and entrepreneurial mentors say **the forecast for certain startups couldn't be better.** Here's what to consider before taking the leap.*



When markets and housing prices are down, and the only thing rising faster than the cost of gas and food is the unemployment rate, why would anyone risk building a new business in a bad economy?

According to a number of entrepreneurs with ties to MIT and MIT Sloan, the proper question should be, "Why not?"

Albeit a more challenging time, say entrepreneurs and funders alike, we are currently in a period that is rife with opportunities for a multitude of reasons,



The silver lining

not the least of which is the growing pool of unemployed talent created by the loss of jobs in nearly all sectors. Yes, markets are down, and angel and venture capital funding are harder to come by due in no small part to a dearth of IPOs and fear on the part of investors who are still tallying stock market losses. Yet, while the tightening of VC funds may be a factor for larger, higher-risk ventures in need of significant startup capital, the same is not true for new companies built on innovative ideas that can run on moxie and a shoestring budget.

“When money comes easy, it goes easy,” says Erika Williams, SM ’78, an interim CEO and board member of a number of Silicon Valley companies. “While it is definitely the case that it is more difficult to find venture money right now, my take is you are better off to bootstrap yourself until you can find good customers. When you have a great idea and you want to get funding ... investors are going to want a big chunk of the company, and you end up with a small sliver. So you are much better off building as much as you can to take the company as far as you can on your own resources.”

But, resources aside, if now is a good time, is it a good time for anyone armed with an idea and a dream?

“The economy does drive startups,” says MIT Sloan Professor Ed Roberts, SM ’60, founder and chair of MIT’s Entrepreneurship Center, “but there is no correlation between the economic conditions when you start and the later success or failure of a company. So if you’re looking for an outcome five or 10 years downstream, do it.”

Illustrations by Andrew Baker

“The percentage of people who are capable of being entrepreneurs is much higher than people realize,” says Alec Dingee, SB ’52, chairman and co-founder of MIT’s Venture Mentoring Service (VMS). “If you’ve lost a job and you’ve got hard pressure to go find an alternative, the easiest thing to do is go start a company.”

As is often the case, the numbers speak for themselves. A quick review of recessionary history and the Fortune 500 points to countless examples of ventures started in tough economic times—Disney, Microsoft, Hewlett-Packard, Hyatt, Burger King, CNN, and MTV, to name just a few—that eventually found their way to fruition and beyond.

As Alexis de Raadt-St. James, SF ’01, founder and chairman of The Althea Foundation, a social venture fund based in San Francisco and London, points out, “Of the 2009 Fortune 500, half of the top 50 companies, and seven of the top 10, were founded in a recession. Now *is* the time.”

Should you plan to plough ahead, here’s more of what the experts have to say on the secrets to entrepreneurial survival and, potentially, success.

1. The right people

American industrialist and philanthropist Andrew Carnegie once stated that teamwork “is the fuel that allows common people to attain uncommon results.”

“Right now you have all these terrific people who are available to get together and start a company,” says Tim Rowe, MBA ’95, co-founder and CEO of the Cambridge Innovation Center, a flexible office space facility in Kendall Square that houses 200 small companies on 10 floors. “Funding without the right people won’t get you anywhere, and you can’t do anything without the right people around you.”

With the U.S. unemployment figures continuing to rise, with a high of 9.5 percent as of July 1, there are more of the “right people” around than there have been in more than 20 years, and some will clearly choose either to start their own ventures or to work within them. Today’s labor supply is strong as a result of both corporate and organizational layoffs, as well as buyouts taken by “bright, capable people,” according to Dingee.

“This is an excellent time,” says Williams, “and there are a lot more people available who do not require huge resources. I know a fellow who started a company in 2002 who was able to get people to work for him for almost two years without any cash payments. They were getting paid in stock. Now another friend I have is starting a company, and it is amazing the amount of talented people he has been able to tap.”

2. Necessary resources

Few places, if any, can rival the cultivation and entrepreneurial output of a place like MIT, and few know more about this than Professor Roberts.

A serial entrepreneur himself, Roberts holds four degrees from the Institute and was the driving force behind the \$100K Competition, the Entrepreneurship Center, MIT Sloan’s Entrepreneurship & Innovation (E & I) track, and the world-renowned MIT Enterprise Forum, which today boasts 24 chapters worldwide.

“There’s a totally different world of entrepreneurship today at MIT,” says Roberts. “The kids at MIT today have no idea what entrepreneurship was like here 15 years ago.”

But Roberts does, having watched the number of students taking entrepreneurship courses increase from 200-plus to more than 1,500 per year, and the number of professors and lecturers increase from two to 30.

“We now have 30 courses and infinite clubs,” Roberts says of the expansive range of offerings available to budding entrepreneurs. “In addition, the \$10K Competition is now the \$100K Competition, which is a misnomer since we gave away a total of \$500K this year,” in categories that include nanotechnology, biomedical technology, and clean energy.

.....>

“The percentage of people who are capable of being entrepreneurs is much higher than people realize.”

Alec Dingee, SB ’52

.....>



It is for this very reason that MIT's Venture Mentoring Service (VMS) was launched in 2000 by co-founders Dingee and MIT Professor David H. Staelin as yet another means "to support entrepreneurial activity throughout the MIT community" by students, faculty, staff, and alumni. Through VMS, a group of more than 100 volunteer mentors help budding entrepreneurs with everything from their business plans to customer and product development.

"A place like MIT provides an enormous amount of resources that you can lean on and borrow," says Roman Lubynsky, SM '89, an entrepreneur and senior venture advisor at VMS. "The ecosystem that is there to support entrepreneurs is great, and VMS is just one of the examples. You can come to our mentors, and they can explain what different aspects there are to entrepreneurship and give advice on how to keep moving forward."

3. Find your niche

From his own early days of entrepreneurship, Rowe learned the importance of finding the right niche to frame a business plan, dating back to his days in middle school.

Realizing that a number of his parents' friends were buying personal computers for the first time, Rowe seized the opportunity to start his own consultancy, charging \$150 to advise grown-ups on how to pick out a home computer, how to set it up, and then use it.

"PCs were new and people didn't know how to use them," says Rowe. "It was a fun opportunity." And, he says, a

lucrative one. Many years and a number of businesses later, Rowe co-founded a solution to another unmet need via the launch of the Cambridge Innovation Center (CIC) in 1999, “the area’s largest and most popular flexible office space facility for small and growing companies,” according to the CIC website.

Today, CIC houses 200 companies on 10 floors at One Broadway in Kendall Square, providing attractive office space equipped with all possible modern conveniences. Price is determined by “the type and size of space” the business needs, ranging from \$250 to \$1,000 per month per person, and Rowe said CIC has continued to grow over the past decade—and in recent months—at a consistent rate.

“You need to carve out that niche that no one else is doing,” says Dr. Ronjon Nag, SM ’91, a founder of Lexicus, a pioneer of speech and handwriting technology that sold to Motorola for an undisclosed eight-figure sum in 1993, and now CEO and co-founder of the wireless applications company Cellmania. “If you are resourceful enough, you will find your space, and, if anything, the recession makes you more acute in your thinking.”



4. Strength in numbers

During a March 2009 appearance on CNBC, Kauffman Foundation President Carl J. Schramm stated that more than half of the companies currently on the Dow Jones Industrial Average were started either in bear markets or in recessions. In addition, Schramm—who has led the world’s largest foundation dedicated to entrepreneurship since 2002—added that one-third of U.S. gross domestic product comes from firms that did not exist in 1980.

“That’s how important entrepreneurship has become to the American economy,” Schramm says. “In past recessions, it has actually been the boom of entrepreneurship that has actually resolved the recession once the bottom has been hit.”

Rowe, who has been at the helm of CIC through two significant economic slides, believes the worst may already be over.

“This is our second time through a downturn,” says Rowe, “and the first time we were surprised to make it through. The second time, we are surprised how well it has gone. We have remained profitable throughout this entire downturn.”

CIC has also grown in the midst of the current economic slump, from 180 companies on October 1, 2008, to 200 companies today.

“You hear a lot of different things about the economy, but my direct experience is we are seeing more new companies than we usually do, and we are seeing a lot of hiring,” Rowe says. “As a measure, in the last two weeks we added 55 new people to the center. On average, our companies have five employees, so across the 200 companies they have hired 55 people. I don’t know where else in the economy you are seeing that kind of growth.”

5. Believe in your idea

Among the more recent additions to CIC is MassChallenge, a new venture capital competition co-founded by Akhil Nigamand, David Constanine, and John Harthorne, MBA '07, based on MIT's own \$100K Competition, which Harthorne won in 2007.

Their premise: to promote the development and growth of startups in Massachusetts via grants of \$50,000 to winning business plans.

As the team of three refined their pitch on their idea and began networking, they found support in the right places, including an endorsement from Gururaj "Desh" Deshpande, HM '07, co-founder and chairman of Sycamore Networks. Deshpande's support of the MassChallenge idea led not only to the provision of free office space at CIC, but also ultimately paved the way for a \$100,000 planning grant from the Massachusetts Technology Collaborative's John Adams Innovation Institute.

Within 48 hours, said Harthorne, the \$100,000 state grant was turned into \$350,000, thanks to additional contributions from Deshpande, Microsoft, and the Kauffman Foundation, building a base of support for the significant fund raising that still lies ahead to reach a goal of \$25 million.

"Entrepreneurship is a contact sport ... it can't be learned in a classroom," said Harthorne, citing MIT Sloan senior lecturer and E-Center former managing director, Ken Morse. (Senior Lecturer Bill Aulet, himself a serial entrepreneur, has succeeded Morse and is now the acting managing director of the E-Center.) "Ken has said you will never exercise your skills as much as when you are starting a new business. You have to create everything."

You also have to convince funders and customers alike that your idea is as good as, or even better, than you think it is.

"It's very important to care about your idea and to think about it all the time," said Harthorne. "You have to be able to say, 'This is going to change the world,' and you have to believe it."



"If you are resourceful enough, you will find your space; and, if anything, the recession makes you more acute in your thinking."

Dr. Ronjon Nag, SM '91



6. The spectrum of funding

While self-financing—also known as bootstrapping—may be the name of the game for certain types of ventures in a down economy, the same is often not the case in the realm of life sciences, encompassing biotech, pharmaceutical, and medical devices.

"That's where there are heavy problems, mainly for two reasons," says Roberts. "One, life sciences companies need a lot of money, and two, they take a lot of time ... so there's no short run. With a device company, you can say, 'I can be to market in 12 to 18 months.' Right now, device companies can get funded, but biotech or pharmaceutical companies can't get funded, unless you get money from a foundation like Gates."

Roberts, who has also worked for years as an angel investor, said in tough economic times, angels are "quick to flee," or, quoting MIT Sloan's Sarofim Family Career Development Professor Fiona Murray, "In times like this, angels go to heaven."

“Our preliminary findings suggest that investment from VCs and angels is more limited and more focused on short-term targets and high levels of capital efficiency,” says Murray, who has been working on this issue along with Price Waterhouse Coopers and the Mass Life Sciences Collaborative.

“What this means for entrepreneurs in this sector is finding plans that have shorter time to revenues, are less capital intensive, and can meet value-creating proof-of-concept milestones in a timely and effective fashion,” Murray says. “This is certainly pushing attention toward diagnostics and devices and away from very high-risk and long-term drug discovery projects. There is also an emerging role of foundations in funding life science investments as well as entrepreneurs having to make more creative use of government funding, including Small Business Innovation Research (SBIR) and some dedicated sources of state funding or funds from the Recovery Act.”

It should be noted, however, that it is not only the life sciences entrepreneurs who have a chance to apply for funding through SBIR or the Recovery Act.

“There’s a huge stimulus package geared to drive economic activity,” says Harthorne, whose venture has already benefited from a state-based grant. “So you have to ask, What do people need? What sort of hidden assets do I have? And how do I leverage my story and my history?”

7. The value of sweat equity

Serial entrepreneur and angel investor Peter Schmidt, SM '92, said that when he and his wife, Hollie Schmidt, LFM '92, embarked on a joint venture in 2001, “we probably picked the worst time in the last 50 years to start a high-tech consulting company.”

“In a recession, there are more real opportunities, but it is also harder to go after them,” says Schmidt, who has started more than 10 companies, including a software venture co-founded with his wife while both were at MIT Sloan that later sold to Teradyne for \$20 million. “As a recession matures, a couple of things happen. Companies have reorganized and they are now understaffed for what they would like to achieve. This gives entrepreneurs a chance to bootstrap ... which works well in many high-tech companies where you can apply the same skills to your job as well as to your own effort. Hollie and I worked seven days a week at our startup, so we worked 40 hours a week at our jobs and we could still work 40 hours a week at our startup, and we kept it up for three or four years.”

Initially, Harthorne and his partners at MassChallenge did exactly that as well, maintaining full-time jobs while working on their new, nonprofit venture out of a home office and “using a mirror as a whiteboard.” Others, like Ronjon Nag, ploughed ahead with their ideas and without jobs, even amid the humble beginnings of a small garage.

“We were a classic Silicon Valley startup, with no money and no Web site. It was all about networking, and we lived hand to mouth, month to month, in a very tiny garage,” Nag says. “But we got incredible press. A two-line story in *PC Week* led to a mention in *InfoWorld*, then NPR, the *New York Times*, and then the cover of *Fortune* magazine... Three months later, Motorola bought the company.”

8. Understand your market

When times are tough, venture ideas based on problem solving and cost savings are key, say entrepreneurs and entrepreneurial mentors, as are the customers needed to buy them.

“A lot of times, people focus on the product development process, but don’t think as much about the customer development process,” says Lubynsky. “It’s important to do as much as you can exploring customers and validating your product as much as possible, and you have to get out there and talk to them before you build a lot of technology. This way, you learn an enormous amount about your target customer and probably find other target customers as well.”

“You need to understand your market very well,” says Williams. “Where will you find customers, and will they be willing to pay for what you are producing?”

Ideas based on something even simpler may work, too, as is the case with Twitter, the much buzzed about online service founded in 2006 that the *New York Times* has called “one of the fastest-growing phenomena on the Internet.” Yet, despite millions of registered users and a plethora of publicity, they have yet to turn a profit.

“Twitter has critical mass; and if a company is big enough and unprofitable, the belief is that eventually you will find a way to make money,” Schmidt says.



The final test

As a longtime consultant and mentor, Schmidt says he always asks his clients five questions that every entrepreneur should be able to answer: Who is going to buy? What are they going to buy? For how much? When? And why?

“When I say, ‘Who?’ I want specific names, not just names of customer companies, but names of individual human beings ... and when you say, ‘What?’ you have to define your product at two levels of detail deeper than your elevator pitch,” says Schmidt. “The ‘How much?’ again ties in with the design, as you have to understand your value change to the end user and what fraction of that you can capture. ‘When?’ is that very difficult question of how do you roll

this out over time and how to get things moving and fill out your product vision. And the ‘Why?’ is perhaps the most critical question of all... .”

It is the final question, says Schmidt, where he needs to hear the compelling reason of why this company should begin in the first place, and what types of benefits or services will it offer to those who may choose to use it, or buy it.

“If you can’t answer the ‘Why?’ very well, that’s a red flag,” says Schmidt. “If the answer is, ‘I have a burning desire to change the world with my idea,’ then I say we will find a way to make that happen.” ● ● ●



Five MIT Sloan companies to watch

Entrepreneurism has always thrived at MIT Sloan—and it continues to do so, even in today's economy. Despite the market turmoil that has presented enormous challenges for businesses worldwide, companies like Voxify, InVivo Therapeutics, Julianna Rae, HubSpot, and Visible Measures have all found ways to survive and flourish through the downturn.



Patrick Nguyen, SM '93

Voxify

Innovating new markets

Patrick Nguyen, SM '93, and his two co-founders (also MIT alumni) had no industry experience in speech recognition technology when they decided to start their company, **Voxify**, in 2001. They were simply three entrepreneurs looking for an area of enterprise software that was ripe for taking off, Nguyen recalls. Eight years later, with quarterly revenue on a continuous upswing, a growing client list including Continental Airlines, Rite Aid, and MetroPCS—along with a recent \$15 million investment led by Intel Capital—they seem to have done just that.

Built around their patented “Conversation Engine,” the Voxify product is the first to create automated agents with the conversational skills needed to handle even the most complicated customer service calls. “The real challenge with speech,” Nguyen explains, “is that it is a very different medium from the Web. People are very familiar with the Web as a user interface, and a whole population of developers has experience in building websites. But speech is still a relatively new medium, and there are many challenges in designing an application that effectively guides callers to achieve their intended outcome without requiring a human agent.”

In the past, companies tended to crack this problem by doing what Nguyen describes as “throwing bodies”—assembling teams of PhDs and professional services people with specialized expertise. Although this sometimes resulted in good systems, they were very expensive and took years to roll out. Being software engineers at heart, Nguyen and his team streamlined the entire process. By codifying a number of speech best practices and techniques and then building them into a software platform, they were able to automate the process of developing an enterprise-class speech application. This made the process much faster and much less expensive as well.

“It was an opportunity,” says Nguyen, “to take something that had been left in the realm of experts and artists and turn it into something that was much more of a science.” From the very beginning, that focus on simplicity has been the key to the company’s success. They landed their first customer, DreamWorks Studios, in 2002, just before raising their first round of venture capital. Since then, the company has never stopped growing. Having moved into the financial space with the insurance giant The Hartford, Voxify is now building a partnership with AT&T—one of the major players in the call center world—and is well on its way to sustainable profitability. “Right now, I would classify ourselves as a mid- to late-

stage venture-backed company,” says Nguyen. “However, there is definitely a huge untapped opportunity in the marketplace to grow a \$100 million company in terms of revenue in this space.”

Nguyen notes that MIT Sloan played a key role in the company’s success every step of the way. “In the beginning stages of a company,” he explains, “you can’t afford a CFO, a VP of marketing, or a VP of operations. A startup is like a microcosm of all these disciplines in one concentrated place. Among the founders, you have to perform all of these various roles at once. The only way I was able to accomplish this was through my experience at MIT Sloan.”

InVivo Therapeutics, a Cambridge-based medical device company, isn't just poised for success—the company is well on its way to creating a whole new clinical franchise in medicine and changing the lives of millions of people around the world who suffer from spinal cord injuries. Focused on combining polymers and stem cells to restore function in paralyzed individuals, InVivo Therapeutics has made a number of promising incremental steps toward finally unlocking the most difficult challenges surrounding the treatment of spinal cord injuries. Through a collaborated effort between MIT's Langer Lab and the Department of Neuroscience at Harvard Medical School, they have developed a device, which is due on the market in 2010, that will provide the first “neuro-tissue engineered” therapy for spinal cord injuries. The developments that follow promise to help prevent the secondary loss of function associated with spinal

cord trauma—including sensory, motor, bowel, and bladder—and, in the future, to potentially restore even fully paralyzed individuals to the level of function and activity they had prior to their injury.

For **Frank Reynolds, MBA '06**, chairman of the board, CEO, and one of the founders of InVivo Therapeutics, the company is more than just a business, it is his life's calling. When an accident left Reynolds paralyzed in 1992, many believed he would never walk again. But after spending years in bed, with little progress being made through traditional medical methods, he created his own plan for recovery. Fifteen months later, he was out of his body brace and establishing an impressive career at Siemens Corporation. When he came to MIT Sloan as part of the Sloan Fellows program in 2005, Reynolds met Professor Bob Langer, a prominent medical innovator working on new ways to approach spinal cord injuries. Within 10 minutes of meeting, the two knew that they should be working together. “It truly felt like it was my destiny,”



Frank Reynolds, MBA '06

Reynolds says. “When I was paralyzed, I was in health care on the mental health side of the business and was conducting FDA trials for anti-depressants. So I understood the regulatory path for getting a product to market, I knew about the design of studies, and I had exposure to all the areas of a life science company. Though my career plan wasn't about developing a treatment for paralysis, when the opportunity presented itself, I decided to risk it all. I knew that everything I'd been through in life personally—and all those skill sets I had developed professionally—were going to be utilized for InVivo.”

Still studying at MIT Sloan when the company was founded, Reynolds split his time between classes and the InVivo office on the edge of campus. In May 2006, he completed his thesis, “InVivo Therapeutics Corporation.” Dedicating himself full-time to the company, he quickly made great strides toward a number of important goals. The company arrived at primate studies faster and for less money than any other company in the history of life sciences. Given the company's unprecedented success rate, Reynolds is hopeful that InVivo could one day change the lives of countless people who are suffering just as he once did.

“Nobody could ever explain to me why I walked again, but this really answered it for me. The reason I walked again was to bring this technology to market.”

INVIVO
THERAPEUTICS

The success of Cambridge-based software company **HubSpot** comes from the simple awareness that the world we live in today differs vastly from the world of 50 years ago. Founders **Brian Halligan, MBA '05**, and **Dharmesh Shah, SM '06**, realized that while it was once possible for marketers “to interrupt their way into customers’ wallets” (as Halligan puts it) via television and radio ads, e-mail spam, or cold calls, people have become better and better at blocking out marketing. Whether it is through TiVo® or Satellite Radio, spam blockers or Caller ID, audiences now have the tools to completely filter out the intrusion of traditional advertising. A new approach was needed to take advantage of the way people now tend to shop.

To that end, Halligan and Shah conceived the idea of inbound marketing, a strategy that enables potential customers to find companies over the natural course of their learning and shopping on the Internet. Halligan believes it is the beginning of a new macro-level trend in marketing—and judging from the success of their software, that trend is already in full swing. After

raising their first round of angel funding with the help of MIT Professor Ed Roberts in June 2006, they immediately began attracting both customers and investors. General Catalyst led a \$5 million Series A financing in 2007, and Matrix Partners led a subsequent Series B round in June 2008. And with 2009 projected to be another year of 300-plus percent annual growth, HubSpot has clearly tapped into an important need within the market.

To say that the company began at MIT Sloan could not be more of an understatement. Not only did the two founders meet at the School—and not only was Professor Ed Roberts an early investor—but Halligan and Shah also utilized their classes at MIT Sloan whenever possible to help solidify their future business plans. “Because we were going to do a startup together, we knew that at some point we would have to work through founder issues, founder equity, and founder compensation,” says Shah. “We said, ‘Let’s just work on it together in a nice safe academic setting.’” Now, with seven out of the nine people

on their management team being MIT Sloan alumni and their office literally only a block from campus, the MIT Sloan connection continues to be strong.

“We would love to create a historically significant, publicly traded company right here in Kendall Square,” says Halligan. “In the technology industry, there has been a longstanding rivalry between Boston and California. We would like to build a Silicon Valley-style company in Kendall Square, right across the street from MIT. We are trying to learn as much as we can from the successes of Google and eBay, so that we can create another center of gravity in this new marketing space.”



HubSpot

Moving the world to inbound marketing



Brian Halligan, MBA '05



Dharmesh Shah, SM '06

In 2004, when **Juli Lee, MBA '95**, first began laying the foundation for her women's apparel company, **Julianna Rae**, the odds seemed to be stacked hopelessly against her. An apparel brand getting its start on the Internet—with no stores, no catalog, and no other source of brand recognition—was unheard of. And Julianna Rae specialized in selling high-end lingerie and sleepwear, products then considered very difficult to sell online. Five years later, the company boasts a triple-digit growth rate through nearly every year of its existence, and is on track for the same in 2009 when retail is having one of its worst years ever. Amassing an ever-growing customer base through word-of-mouth and TV and magazine features ranging from *The Today Show* to *Vanity Fair* and *Lucky*, Julianna Rae has rewritten the book on how to start a clothing line.

Much of the company's success, Lee explains, comes down to what is probably the simplest rule of business: Find a need and fill it. "As my friends began to hit their 30s," she recalls, "they started complaining to me that they couldn't find good lingerie out in the market. The more research I did, the more I saw a big gap between the spot where brands like Victoria's Secret leave off and brands that cater to older women pick up."

Having designed for a number of years for companies like J. Jill, Nordstrom, and L.L.Bean, she knew the apparel market well. Lee also realized that she could tap into a huge buying public above the age of 30. After finding a pair of partners to round out the management team, they dove in and found new ways to handle problems of distribution, marketing, and branding.

Simplicity was a key element to the success of the website. Knowing that the age segment they were targeting was not always the most familiar with the Internet, Lee and her partners made sure that purchasing products on JuliannaRae.com was as easy as possible. Eliminating the cost of shipping altogether erased one of the biggest inhibitors to buying an unknown brand. The way in which the Julianna Rae product was positioned within the market was also important. While most sleepwear and lingerie are marketed with a big bedroom focus, Julianna Rae took another tact. "Our brand is not about being in the bedroom," Lee says. "It is much more a lifestyle product that is about making the customer feel good. When we first started our photography, we focused more on people doing things you wouldn't normally do in lingerie, to give it a little more humor appeal and a little whimsy."

The formula has paid off. Over the past few years, Julianna Rae has grown to include a printed catalog, and is now carried in a number of select high-end resorts, including seven of the top 10 destination resorts in the United States as rated by *Condé Nast Traveler* magazine. And, as if that were not impressive enough, Julianna Rae products have also been worn at one point or another by every cast member of TV's *Desperate Housewives*.

Lee says her MIT Sloan background has been critical in how she has thought about, analyzed, and planned Julianna Rae from the beginning. "My undergraduate degree is from MIT as well. I think some people may laugh because here I am designing underwear, but design is a very visual and creative process. So much of what you incorporate into design and how you create a product is based on analyzing the needs of your customers. MIT has been critical in helping me build a basis for the disciplined, data-driven way we think here."

Julianna Rae

Rewriting the rules



Juli Lee, MBA '95

Julianna Rae



Brian Shin, MBA '06

Visible Measures

Advertising reinvented

In response to the soaring growth of the Internet video market, **Visible Measures**—a Boston-based company founded in 2005 by **Brian Shin, MBA '06**—allows Internet video publishers and advertisers to track the consumption of their content in a number of new and meaningful ways. Using as a guide the gross rating point system already familiar to television and radio advertisers, Shin developed a series of new metrics designed specifically to account for the much more social and data-rich landscape of the online world.

Traditionally, Shin says, an advertisement was rated according to reach—a measure of how many people you were able to touch with your message, multiplied by the frequency with which you were able to do so. Extending this formula, Visible Measures tracks video content according to what they call *true reach*, a metric that measures the total audience that has been exposed to an online video campaign. “The idea is that we measure the consumption of both paid and social video content—all the clips that are related to a particular ad/film campaign. We do this across 150-plus video-sharing sites like YouTube, MySpace, DailyMotion, and Metacafe, measuring all the clips related to a campaign across 150-plus video-sharing sites.”

Another set of metrics, known as *engagement* metrics, measures the intensity of each user’s experience while viewing a given video: Did they stop midway through? Did they rewind at a certain point? Did they watch it again—and, if so, how many times? Finally, a set of advocacy metrics measures the very important social aspects of the Internet, monitoring whether a user forwarded a given video to a friend, linked to it from the website, or posted it on Twitter.

This innovative approach has made Visible Measures an important resource for advertisers. Ever since Shin, with the help of Professor Ed Roberts, raised his first round of angel funding while still a student at MIT Sloan, the company has grown as quickly as the world of online video itself.

“I would go so far as to say that MIT Sloan is the reason this company got off the ground. And I say that with total gratitude and humility because MIT really did everything for me. Before coming to MIT Sloan, I had been an entrepreneur with some small successes. But after coming to MIT Sloan, I believed there was a platform to dream bigger—it wasn’t impossible for a guy like me who has no experience in advertising to start a company that could potentially be a part of reinventing the way that advertising works.”

Having just raised \$10 million in Series C funding, Visible Measures is working very closely with companies such as YouTube, MTV, MySpace, and Sony. And they are looking forward to establishing Visible Measures as an important economic force in the Boston area, just around the corner from the company’s birthplace. ● ● ●

Dr. Philip C.K. Kwok, SB '61, SE '95

Senior Vice President and CFO, Nirvanix

- Served as CEO of Wing On Group from 1983 to 1986
- Represents MIT Sloan at IMBA graduations in China
- Holds an Eighth Dan Black Belt and won the Kata competition for the over 70 age group



"It was encouraging and enjoyable to learn from MIT Sloan's top faculty."

For more than a decade, The MIT-China Management Education Project has been developing initiatives that prepare the management force of China for business in the global arena. The success and growth of the project would not have been possible without the help of Dr. Philip C.K. Kwok.

Deeply committed to his homeland and a strong advocate of education, Dr. Kwok approached Deputy Dean Alan White in 1994 to urge MIT Sloan to develop the MIT-China Management Education Project. "At that time I was more interested in developing short executive management programs for senior managers in State Owned Enterprises (SOEs)," Dr. Kwok explains. "I felt that MIT Sloan could bring about fundamental change in Chinese business schools by allowing their faculty and students to experience how management education is conducted in the West."

As CEO of Wing On Group, Kwok established Wing On as one of the leading business conglomerates in Hong Kong, and has served on numerous government bodies in China. He was Vice Chairman of the Consultative Committee for the

Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China, and the Chinese government appointed him as one of the Hong Kong affairs advisors.

After reaching out to Dean White, Kwok returned to MIT to participate in an eight-week Executive Education course at the School, which also bolstered his knowledge of the School's programs and gave him a better grasp of how this project would develop. At the time he was 56 years old. "As a middle-aged businessman who was an academic before, to go back to school again was an entirely new experience," he shares. "It was encouraging and enjoyable to learn from MIT Sloan's top faculty."

In 1996 MIT Sloan forged a partnership with two of the country's top management schools: Tsinghua in Beijing and Fudan in Shanghai. Since then, Zhongshan University in Guangzhou has joined and over 3,000 IMBAs have graduated the program.

Kwok has supported the MIT-China Management Education Project every step of the way, developing the project's curriculum, expanding its network of sponsors across the globe, and assisting at proceedings between MIT Sloan and its partner universities. He continues to serve as special advisor to the project and is the MIT Sloan School of Management Program Liaison for China. During IMBA graduations abroad, he often represents the School by distributing diplomas to its students. "I believe that the project has made a tremendous and unforeseen impact on how business is conducted in China," he explains. "I have read hundreds of positive testimonials from our graduates since the program started."

In recognition of his contribution to the Project, Dr. Kwok was appointed Adjunct Professor of the School of Management of Fudan University. He also serves on the MIT Sloan Asian Executive Board and leads a key committee of the Board concerned with the School's global visibility.

2009 | 2005 | 2000 | 1995 | 1990 | 1985 | 1980 | 1975 | 1970 | 1965 | 1960 | 1955



MIT SLOAN Reunion '10

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calendar!
June 3-6

Reunion 2010 will be here before you know it. Please mark your calendar for a weekend of re-connecting with former classmates and MIT Sloan.

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- Class-specific events
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- Back to the Classroom with MIT Sloan faculty
- Consumption function
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Help us plan a great Reunion. Volunteer to be a member of your class reunion committee. If you would like to participate, please e-mail the Reunion team at mitsloanreunionteam@mit.edu or call **617-253-1557**.

Keep updated on Reunion 2010 at the Web site:
<http://mitsloan.mit.edu/alumni/reunion>



Peter Condakes, SM '80

President, Peter Condakes Company

- Has served as the president of the Peter Condakes Company since 2000
- Brought the kiwi fruit to market
- Packages a line of tomatoes under the name Harvest Queen



“MIT Sloan reinforced that there is more to a successful produce business than simply the buying and selling.”

In 1900, a Greek immigrant by the name of Peter Condakes sold his first orange from behind a small pushcart on a Boston street. Over a century later, the Peter Condakes Company has grown to become a leader in the New England produce industry. Peter Condakes's grandson, also Peter Condakes, is the president of this wholesaler and truckload distributor. The company has gone from a pushcart to providing over 300 different fruits, vegetables, and tropical crops to wholesalers, supermarkets, retailers, and food-service providers such as the Cheesecake Factory and Applebee's.

Condakes worked on and off at his family's business starting when he was teenager, but did not join the company permanently until 1993 after he graduated from MIT Sloan and spent some time working outside the produce industry. At Peter Condakes Company, he started out managing several lines of tomatoes and quickly became an expert on the fruit. In addition to overseeing the buying and selling of these products, he spent much of his time on the lines guaranteeing the quality of his produce. "Knowing when a tomato is ripe and the conditions it needs to get to that point is not a science but an art," Condakes reveals. One glance at a tomato and he can tell you the temperature it needs to ripen, the time it will take, and which buyers will want to purchase it.

In 1998, Condakes expanded his product line and brought grape tomatoes to market. At first he was surprised by the low level of interest in buyers, but within two years they became a mainstream commodity. "Most fruits take more time than that,"

says Condakes. "The kiwi fruit took 10 years before it became popular." The company's tomato lines continue to comprise a large portion of Condakes's business with over 720,000 pounds of the crop moving through their market each week. The company even repackages its own line of tomatoes under the name Harvest Queen.

Even as president of Peter Condakes Company, a position he assumed in 2000, Condakes still spends many hours a day on the floor buying and selling. "Each day the market opens at 5 a.m., and it can be just as unpredictable as Wall Street," he explains. "It is not rare to go in feeling one way about the market and then feel the complete opposite within an hour."

Off the floor, Condakes implements changes to the company that strengthen its position as a leading produce distributor. "MIT Sloan reinforced that there is more to a successful produce business than simply the buying and selling," he says. "Now the finance and administration side of our business is given the attention it deserved."

Condakes has installed state-of-the-art machinery to increase product line efficiency, hired a CFO who has improved their inventory structure, and moved their systems completely online so all products can be traced back to their source. "All these changes were needed to ensure the future of my family's business," Condakes says. "And MIT Sloan gave me the confidence to make these decisions."



Major Horton, SM '87

Senior Vice President and CFO, Nirvanix

- Implemented the first distributed database for General Motors
- Attended MIT Sloan on a GM Fellowship awarded to 15 students across the world
- Serves as Senior Vice President and CFO of Nirvanix, a venture-backed company specializing in cloud computing storage

“MIT Sloan taught me that companies like GM need to be more customer-centric ... so I decided to try consulting in order to learn about other business cultures and help them strengthen their focus on clients.”

Major Horton has a passion for improving organizational structures and processes. It led him to implement the first distributed database for General Motors (GM), then to design robotics for automated manufacturing plants, and later to build financial systems for companies like Dell Computers. Now, he's focusing that passion on his latest project, Nirvanix, an IT startup working to bring an emerging technology called cloud storage to the mainstream.

After working in IT and engineering for General Motors, Horton was torn between pursuing a Master of Electrical Engineering Degree or an MBA. Attracted to the breadth of topics and principles covered in a management program, Horton chose MIT Sloan where he could study the technical side of business. Following graduation, he returned to GM as a senior competitive analyst, a position that allowed him to travel the world to juxtapose the company's products and operations against the competition. That experience instilled in Horton a desire to explore different management styles and operational ideologies. “MIT Sloan taught me that companies like GM need to be more customer-centric,” he says. “So I decided to try consulting in order to learn about other business cultures and help them strengthen their focus on clients.”

At first, Horton feared that consultant work would be too superficial—too much theory without follow-up—so he worked with firms that allowed him to implement his own recommendations. “The great thing about consulting is that they don't call you until things are really bad,” he shares. “I love that challenge.” He spent four years consulting with various businesses, hospitals, and universities to improve their operations. With a deeper understanding of management systems, Horton left consulting to once again build and improve business processes and systems. He worked for AlliedSignal as the Director of Financial Planning and Analysis and then for Dell Computer as a Vice President of Finance, charged with improving their financial processes and execution.

After a short stint as CFO for Rackspace, in late 2007 Horton became the Senior Vice President and CFO of Nirvanix, a venture-backed company in San Diego specializing in cloud computing storage. Working with an emerging technology such as cloud storage is the kind of challenge Horton craves. “There is so much potential for this industry and a huge upside for the winners,” he explains. “I'm excited to be a part of uncovering this product's potential and wearing many hats as we ramp the business.” Horton's current role entails managing the company's HR, procurement, and legal functions in addition to serving as Corporate Secretary for its board of directors.

Now living in San Diego, he has created an MIT Sloan alumni group on LinkedIn—now with more than 3,400 group members—to reach out to fellow graduates. Horton was surprised at the number of classmates living in his city. “And then there are those I have been able to connect with across the country and around the globe,” he adds. “It has become an excellent way to connect with some of the best people out there. The quality of MIT Sloan graduates—and thus the network—is truly remarkable.”

Stephanie Tan, MBA '98

Research Consultant, Russell Reynolds Associates

- Began her career as a civil engineer providing litigation support
- Serves as a class agent for the Class of 1998
- Works as a research consultant at Russell Reynolds Associates, a global retained executive search firm



“Working at a global consulting firm after school is one of the best training grounds to learn about business.”

Stephanie Tan started her career as a civil engineer, but followed an unconventional path to executive recruiting.

“You can never predict where your career will head, so be open to different opportunities,” she says. It’s a philosophy that enabled her to circle the world twice in 30 days, and also brought her to MIT Sloan. Now in a position that combines her interests and skills, she values how her own experiences help her assist others.

In Tan’s first job, she provided litigation support for cases involving EPA standards and toxicity levels of groundwater and soil. The environmental aspects of her work interested her, but she wanted an opportunity to have a more personal impact on her clients. Drawn to management consulting and its focus on people, she attended MIT Sloan then joined A.T. Kearney in New York as an Associate. “Working at a global consulting firm after school is one of the best training grounds to learn about business,” she says.

For one of her engineering clients at A.T. Kearney, Tan traveled extensively, twice circumnavigating the world, to interview customers to develop new service offerings for utility companies. When she became a mother in 2004, she ended her days as a “road warrior.” She left the front lines of consulting and moved into a marketing role for the firm, which exposed her to the support side of the consulting industry. Tan valued the comprehensive understanding she gained from being on both the front line and support side of the consulting business, but missed the daily interactions with clients.

In 2005, Tan rejoined the front lines as an Engagement Leader at Infosys Consulting where she spent several years working with both high-tech and distribution companies.

Following a move to Houston where her husband completed his fellowship training, Tan made another career change, this time as a research consultant at Russell Reynolds Associates, a global retained executive search firm. In this role, she recruits senior executives for her clients, which ties together all of her previous work experience and expertise.

“Project management is one of my strengths so I am happy to be managing half a dozen searches at a time,” she explains.

Tan is even leveraging her environmental background. She is based in the firm’s Menlo Park, California, office, where the majority of her clients work in green industries such as solar energy.

“Having been exposed to different industries and roles has allowed me to better understand an individual’s career path,” she reflects. “That is invaluable as a recruiter.”

Tan stays connected to MIT Sloan by acting as a class agent who helps keep her classmates engaged with each other in between reunion years. “It is always great to reconnect with fellow alumni,” she says. “MIT Sloan graduates are an impressive, energetic, and enthusiastic group. And these qualities aren’t just specific to my class; all alumni I meet share them.”

Eric Jones, SF '05

Captain, U.S. Coast Guard Cutter *Eagle*

- Captains *Eagle*, the only square-rigger in U.S. government service
- First encountered *Eagle* when he was 11 years old
- Taught courses in mathematics and leadership at the Coast Guard Academy and was a workforce and operations reviewer at Coast Guard headquarters in Washington

“I learned firsthand how entrepreneurs in this country and in Chile, Argentina, and Brazil are surviving in uncertain times—creatively and intelligently.”

The 73-year-old tall ship *Eagle* might be one of the most elegant sailing vessels on the high seas, but for U.S. Coast Guard Captain Eric Jones, SF '05, it's a proving ground for 21st-century leaders. Jones took command of the 295-foot three-masted tall ship this summer—the only square-rigger flying the Stars and Stripes.

Onboard, Jones oversees a transformative professional development experience that gives future Coast Guard officers the chance to put into practice the navigation, engineering, and professional theory they have learned in the classroom. He commands a permanent crew of six officers and 50 enlisted personnel who maintain the ship and provide a strong base of knowledge and seamanship for the 150 cadets and officer candidates undergoing training.

Jones has spent his life preparing for this command. With a BA in Marine Engineering from the U.S. Coast Guard Academy, an MA in Applied Mathematics and Fluid Dynamics from Brown University, and an MBA from MIT Sloan, he worked his way up from deck watch officer and first lieutenant on board the Coast Guard cutter *Venturous* to executive officer on the cutter *Harriet Lane*. He taught courses in mathematics and leadership at the Coast Guard Academy and was a workforce and operations reviewer at Coast Guard headquarters in Washington. Before taking the helm of *Eagle*, he served

for two years as Deputy Chief of the Office of Congressional and Government Affairs at U.S. Coast Guard Headquarters in Washington.

Jones says he channels everything he learned at MIT Sloan into his command on the high seas. “Going in to the Sloan Fellows Program, I had a whole lot of technical and maritime experience, and I certainly knew a lot about the Coast Guard. What I needed was to understand how organizations work and to learn—through experience—what makes teams flourish.”

As a fellow, Jones was eager to learn how different leaders, different organizations, and different cultures solved problems and achieved goals. He says he found what he was after not just working closely with peers from 22 nations, but also on class trips to New York, Silicon Valley, and South America. “In a relatively small operation like the Coast Guard, an entrepreneurial spirit is important. I learned firsthand how entrepreneurs in this country and in Chile, Argentina, and Brazil are surviving in uncertain times—creatively and intelligently.”

Jones's most recent travels have led him up the east coast from Charleston, South Carolina, to Halifax, Nova Scotia, at the helm of his tall ship. Along the way, *Eagle* docked at the Charlestown Navy Yard and Jones took time to host the current class of Sloan Fellows.

“The MIT Sloan Fellows are a strong network,” Jones says, “personally and professionally.” And the Coast Guard, he adds, has its own MIT Sloan Fellows network, starting at the top with Admiral Thad Allen, SF '89, and Vice Admiral Vivien Crea, SF '92, who was the highest-ranking woman in the military when she retired this month.

“When the Coast Guard is anticipating a thorny challenge,” Jones notes, “they assign a Sloan Fellow to the job.”



Giving entrepreneurs *opportunity and experience*

In “Giving back,” we recognize the enthusiastic support of MIT Sloan’s friends and donors. We also highlight the important educational experiences made possible by gifts to the School.

ROBERTO OLIVEIRA, MBA '10, remembers visiting his grandfather's factory in São Paulo, Brazil, as a small boy. His grandfather, though not formally educated, started his own company making water pumps, and grew it to become the largest supplier of those pumps in Latin America.

That same entrepreneurial drive runs through Oliveira's veins as well. But it was not until a summer internship while at MIT Sloan that Oliveira was able to focus his desire to start companies. That internship helped Oliveira realize how fulfilling he found the work of starting a business.

Oliveira's summer internship was supported in part by a gift from Brad Feld, SM '88, and Amy Batchelor to the MIT Sloan Entrepreneurship Center (E-Center). Edward Roberts, the David Sarnoff Professor of Management of Technology, founded the E-Center in 1990. Since then, the E-Center has been a hub for myriad entrepreneurial activities on the MIT campus, offering educational programs to inspire, train, and coach new generations of entrepreneurs. It also provides networking opportunities, technologies, and resources to entrepreneurs at MIT and globally. Donor support for the E-Center has a direct impact on entrepreneurship.

"Having alumni support us with gifts, as well as their expertise and their networks, is extremely helpful," says Senior Lecturer William Aulet, acting managing director of the E-Center. "They enable us to provide students with the skills, the experience, and the networks to be successful entrepreneurs. As a student, you're investing, and such gifts allow our students to take the long-term view of their investments, and build the skills of an entrepreneur."

Working for a small startup company ... helped Oliveira realize how much he wants to start and grow companies.

The E-Center has created a powerful global network of entrepreneurs who advise and assist each other in the starting of new ventures. A recent report by Professor Roberts and Charles Eesley, PhD '09, "Entrepreneurial Impact: The Role of MIT," highlighted the dramatic effect of MIT's entrepreneurial activities. Based on a 2003 alumni survey, the report shows that MIT alumni have founded 25,800 companies that are currently active. Those companies employ about 3.3 million people and generate annual world sales of \$2 trillion, making them the equivalent of the 11th-largest economy in the world. The report was published by the Ewing Marion Kauffman Foundation.

Since his summer internship, Oliveira is determined to be among the next wave of MIT Sloan's alumni entrepreneurs. The financial support provided by the Feld and Batchelor gift to the E-Center enabled Oliveira to take an internship with a small startup company that could not financially compete with the salaries large consultancies pay summer interns. Through the E-Center, Oliveira was introduced to Brainloop, a company that provides virtual data rooms for project deliberation, board meetings, and negotiating merger and acquisition deals.

Brainloop was seeking someone who speaks Portuguese and could help the company with business development in Brazil. Oliveira spent the summer negotiating for Brainloop with potential

partner companies in Brazil. Working for a small startup company—Brainloop has fewer than 10 employees in Cambridge—helped Oliveira realize how much he wants to start and grow companies.

"It's fascinating. You sell an idea that can make a difference to other people. It's like growing a tree—you plant a seed and you see it grow. You can see all the evolution. You have all the history. And you can shape the company with your beliefs, your ethics, and your energy, ultimately," Oliveira says.

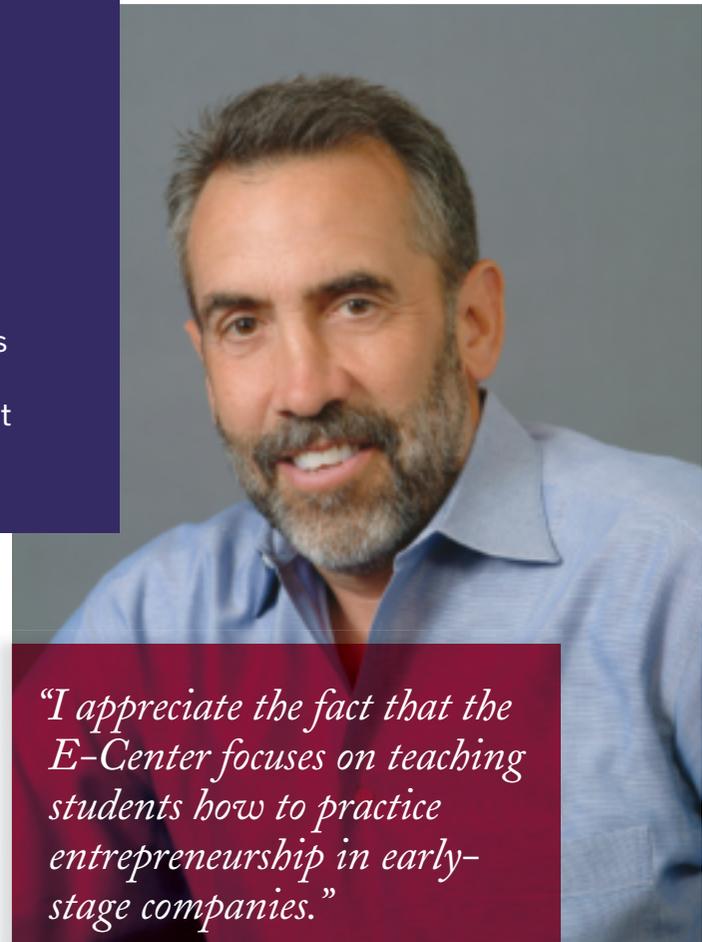
Oliveira describes working at Brainloop as very much a hands-on experience. He had the opportunity to do research, develop marketing and strategic plans, and negotiate with potential partners.

"I applied a lot of tools that I learned throughout [my] first year [at MIT Sloan]. I was able to put into practice what I learned in theory," he says. "I was bringing new ideas, fresh ideas from business school and they appreciated that. I was bringing new knowledge to the company, but I was also learning from their experience."

Allan R. Will, SM '81

Founder and Chairman, The Foundry
Managing Director, Split Rock Partners

- Founded The Foundry, a medical device incubator, in 1998
- Held The Foundry's first liquidity event in October 2009, converting the ownership equity of one of its early firms into a gift to the E-Center
- Lectures at MIT Sloan's Entrepreneur Development Program (EDP) each January



"I appreciate the fact that the E-Center focuses on teaching students how to practice entrepreneurship in early-stage companies."

Allan R. Will graduated from MIT Sloan without ever taking a class in entrepreneurship, but caught the entrepreneurial bug shortly thereafter. Now, more than two decades later, he has run, built, and sold several successful startup medical technology businesses, co-founded more than 10 companies, founded an incubator, lectures on entrepreneurship, and is a major donor to the MIT Entrepreneurship Center (E-Center).

After stints in strategic planning, marketing, and general management at a large company following his time at MIT Sloan, Will joined a medical device startup, Devices for Vascular Intervention (DVI). "I was intrigued by the smaller and 'nimble' parts of large companies," he recalls. "With entrepreneurship, a great deal of your skill base is learned on the job. In my first CEO role, there were 16 employees when I started and over 600 when I left eight years later. Going into this role, I didn't know how to manage options budgets, when to sell a company versus continuing independent growth, or how to motivate and incent small teams to achieve great things."

Since DVI, Will has nurtured entrepreneurial pursuits, making his first of many gifts to the E-Center in 2000. "I appreciate the fact that the E-Center focuses on teaching students how to practice entrepreneurship in early stage companies," he shares. "The principles are difficult to teach from a classroom; but by combining classroom preparation and direct interaction with the entrepreneurial ecosystem, Ed Roberts (David Sarnoff Professor of Management and founder of the E-Center) and Ken Morse (former managing director of the E-Center) have created a great program."

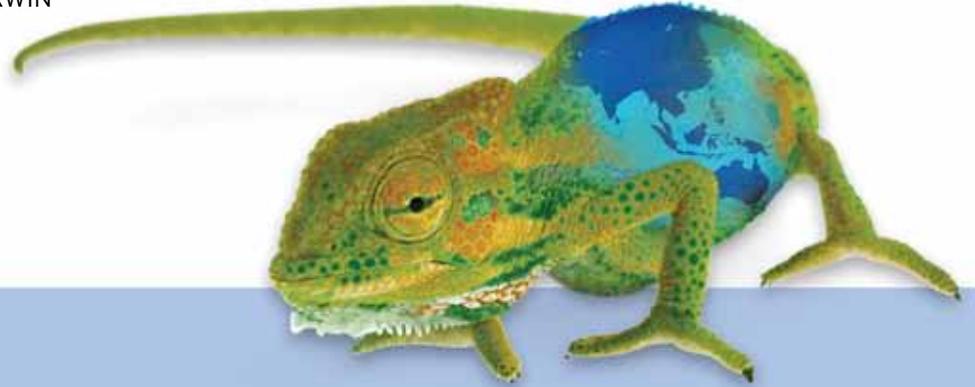
Currently, Will is a managing director at Split Rock Partners, a venture capital firm focused on the medical device and software/Internet services industries, and is chairman of The Foundry, a medical device incubator he founded in 1998. The Foundry pulls together seasoned entrepreneurs who devise solutions to clinical problems, and then form teams to commercialize their ideas.

"Running a startup medical device company was my perfect dream job," he says. "But at this point in my career, investing in startup companies and mentoring young entrepreneurs is the best thing for me to do." The Foundry has formed 11 companies over the past 10 years.

In 2009, Will made his most recent gift to the E-Center of \$30,000. When starting The Foundry, Will pledged a portion of his ownership to the E-Center. This pledge will deliver its first gift later this year as a result of the \$450 million acquisition of The Foundry's first company, Evalve, by Abbott Laboratories. He also lectures at the Entrepreneur Development Program (EDP) each January, a one-week course designed for aspiring entrepreneurs to develop or strengthen a climate of entrepreneurship in their organizations. "It is a chance for me to reflect on the things that I've done and learned," Will says. "Just as the E-Center has been doing, I am able to impart some of the lessons I've learned and mistakes I've made to those who are transitioning into a career in entrepreneurship."

“It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change.”

—CHARLES DARWIN



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